University of Hawaii at Manoa

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June 22, 1989
RP:0108

Mr. Albert S. N. Hee
Mauna Kea Power, Inc.
Grosvenor Center
737 Bishop Street
Suite 2460
Honolulu, Hawaii 96813

Dear Mr. Hee:

Water Quality Certification (WQC) No. 130
Honoli'i Hydroelectric Power Project
South Hilo District, Hawaii

In your letter dated May 19, 1989, you stated that many of our concerns about the above referenced project were addressed in the Final Environmental Impact Statement (EIS). Unfortunately, we did not receive this document until after we reviewed the WQC application. After examining the Final EIS and the report from Synergics, Inc., which accompanied your letter, we note the following concerns which need further clarification.

Sedimentation

According to the report from Synergics, Inc., "the total amount of sediment subject to a possible effect would be 56.1 tons or less than 5 percent of the total sediment discharge. In excess of 90 percent of the sediment is discharged in the very few high flow periods of the year (the remaining 5 percent is an acceptable margin of error)."

1. We do not concur with the statement that "5 percent is an acceptable margin of error". Over the lifetime of this project, 56.1 tons per year is significant and some effort should be made to decrease this margin of error.

2. The accumulation of 56.1 tons of sediment per year, over the project lifetime will become a problem. Will this necessitate a continuous maintenance program?

Overall Water Quality

As our previous comments indicated, we are also concerned about the overall water quality of the affected reach of the stream. According to page 97 of the Final EIS, "Over the long term, there may be temporary periods when the proposed project will affect water quality" - "modest

increases in pH and temperature and decreases in dissolved oxygen" (page 139). "Aggradation of particulate material may also be associated with a reduction in flow within a stream reach...." We can only conclude from the above statements that overall water quality will be degraded at times.

While it is noted that "fauna have survived extremely variable flow conditions and extensive periods of low flow"; it is not known if fauna will survive worse conditions for more extended periods of time. We addressed this issue in our review of the Draft EIS, and DHM, Inc., in their response to our comments, agreed that this was an unknown.

It appears from the previous statements that stream fauna may already be existing under adverse conditions and merely surviving, but not necessarily flourishing. The proposed project will place added stress on the stream fauna, and we do not feel that the long-term effects of this additional stress have been adequately studied.

We concur with your statement that "very little is known about the life cycle of the various fauna present in Hawaii" and "that without biological information about the aquatic fauna affected, correlation of the sediment information developed from any study method is impossible." However, in order to determine the impacts of a proposed project, it is often necessary to do baseline studies. The issue here is not a lack of biological information, but rather a lack of adequate studies to determine the full range of impacts on the stream fauna.

In conclusion, the decision to proceed with this project or not must be based on whether the benefits outweigh the potential impacts. Without the necessary biological studies to determine the potential impact of the project on the stream fauna, we would find it difficult to make this determination.

Yours truly,

John Harrison
Environmental Coordinator

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